GLOSSARY

Acre-feet The volume of liquid or solid required to cover 1 acre to a depth of 1 foot, or

43,560 cubic feet; measure for volumes of water, reservoir rock, etc.

Alluvial Pertaining to material or processes associated with transportation or

deposition of soil and rock by flowing water (e.g., streams or rivers).

Alluvium Unconsolidated or poorly consolidated gravel, sands, and clays deposited by

streams and rivers on riverbeds, floodplains, and alluvial fans.

Anabranch In general, a channel section separated from other channel sections by large

islands or occasionally by large bars. At separate locales in the project region, the main course of the Humboldt River is paralleled by a number of smaller subsidiary channels that may convey flows during normal and higher flow conditions. An example of this can be seen in Whirlwind Valley upstream of the outfall. For lack of a better term, these were referred to as

anabranches.

Anticline A fold in the strata where it is convex upward and the older rocks are toward

the center of the curvature.

Aquifer Stratum or zone that is saturated and sufficiently permeable to transmit

economic quantities of water to wells and springs

Aquitard A low-permeability unit that can store ground water and also transmit it slowly

from one aquifer to another

Argillization The conversion process of minerals in the host rocks to clay minerals.

Artesian Refers to ground water under sufficient hydrostatic head to rise above the

aquifer containing it.

Bedrock Any solid rock exposed at the surface or overlain by unconsolidated material

Cambrian The span of time between 570 and 505 million years ago.

Carbonate A compound containing the radical CO₃, A sediment formed of the

carbonates of calcium, magnesium, and iron (e.g., limestone and dolomite).

Cenozoic The span of time between 66 million years ago to the present.

Chert A mineral or a rock that is siliceous and contains the mineral chert (a fine-

grained variety of quartz).

Clastic A textural term for a sedimentary rock formed from particles (clasts) that were

mechanically transported.

Cone of Depression The depression of heads around a pumping well caused by the withdrawal of

water

Confining Bed A layer of rock having very low hydraulic conductivity that hampers the

movement of water into and out of an aquifer

Conglomerate A sedimentary rock, were a significant fraction of which is composed of

rounded pebbles and boulders.

Cretaceous The span of time between 144 and 66 million years ago.

Decarbonatization The process whereby carbonate-rock minerals are dissolved by hydrothermal

fluids.

Devonian The span of time between 408 and 360 million years ago.

Dike A tabular body of igneous rock that cuts across the structure of adjacent

rocks or cuts massive rocks.

Dolomite A mineral, Calcium magnesium carbonate (CaMg(CO₃)₂), or a rock

composed largely of dolomite.

Dolomitization The process that transforms limestone partly or wholly to dolomite by

replacing the original calcium carbonate (calcite) with calcium magnesium

carbonate (dolomite).

Drawdown The lowering of the water level in a well as a result of withdrawal; the

reduction in head at a point caused by the withdrawal of water from an aquifer

Ephemeral Stream A stream or a portion of a stream that flows briefly in direct response to

precipitation in the immediate vicinity or in response to snowmelt and whose

channel is at all times above the local water table.

Evapotranspiration The portion of precipitation returned to the air through evaporation and plant

transpiration.

Fault A fracture in rock units along which there has been displacement.

Floodplain The portion of a river valley, adjacent to the channel, that is built of sediments

deposited during the present regiment of the stream and that is covered with

water when the river overflows its banks at flood stages.

Fluvial Pertaining to rivers

Greenstone Altered basalt and gabbro.

Ground Water Table The surface between the zone of saturation and the zone of aeration; that

surface of a body of unconfined ground water at which the pressure is equal

to that of the atmosphere

Holocene The span of time between 10,000 years ago and the present.

Host Rock A rock body or wall rock enclosing mineralization.

Hydraulic Conductivity The capacity of a rock to transmit water. It is expressed as the volume of

water at the existing kinematic viscosity that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the

direction of flow.

Hydraulic Gradient Change in head per unit of distance measured in the direction of the steepest

change.

Hydraulic Head The height of the free surface of a body of water above a given subsurface

point. Water flows from high hydraulic head to low, and an increase in head

difference between two points will cause an increase in flow.

Hydrostratigraphic Unit Grouping of stratified, mainly sedimentary rocks that have similar ground

water flow conditions.

Hydrothermal fluids Fluids at high temperatures, generally 300° to 500° C.

Igneous Rock or mineral that solidified from molten or partly molten magma;

processes relating to or resulting from the formation of such rocks.

Intermittent Stream A stream that flows only during part of the year, is below the local water table

for at least some part of the year, and obtains its flow from both surface runoff

and ground water discharge.

Intrusive An igneous rock that solidified below the surface

Jurassic The span of time between 208 and 144 million years ago.

Karst A type of topography formed by dissolving limestone, dolomite, or gypsum

and forming solution cavities, sink holes, caves, and underground drainages. A karst aquifer is an aquifer in which flow of water is or can be appreciable through one or more of the following: joints, faults, bedding planes, and cavities – any or all of which have been enlarged by dissolution of bedrock.

Lacustrine Pertaining to, produced by, or formed in a lake or lakes.

Limestone A sedimentary rock composed principally of calcite.

Mafic An igneous rock were the is composed mostly of the magnesian rock-forming

silicates.

Mesozoic The span of time between 245 and 66 million years ago.

Mineralization The process by which a valuable mineral or minerals are introduced into a

rock.

Miocene The span of time between 23.7 and 5.3 million years ago.

Mississippian The span of time between 360 and 320 million years ago.

Monzonite A type of plutonic rock that contains equal amounts of orthoclase and

plagioclase.

Normal Fault A dip-slip fault in which the block above the fault has moved downward

relative to the block below.

Ordovician The span of time between 505 and 438 million years ago.

Orogeny The process of forming mountains.

Paleozoic The Span of time from the end of the Precambrian to the beginning of the

Mesozoic, ranging from approximately 570 to 245 million years ago.

Pennsylvanian The span of time between 320 and 286 million years ago.

Perennial Stream A stream or reach of stream that flows throughout the year.

Permeable The property or capacity of a porous rock, sediment, or soil to transmit a

liquid.

Permian The span of time between 286 and 245 million years ago.

Piezometer A nonpumping well that is used to measure the elevation of water table or

potentiometric surface.

Playa The flat floor of a closed basin in an arid region. It may be occupied by an

intermittent lake that disappears from evaporation.

Pleistocene The span of time between 1.6 million years and 10,000 years ago.

Pliocene The span of time between 5.3 and 1.6 million years ago.

Pluton Any body of igneous rock that formed below the surface

Point Bar An area where sediment is generally deposited on the inside of stream

channel bends. Where they occur, typically point bars are relatively small, low-lying features adjacent to the flow; portions frequently exposed to active

flow conditions are usually unvegetated.

Porosity The voids or openings in a rock. Porosity may be expressed quantitatively as

the ratio of the volume of openings in a rock to the total volume of the rock.

Potentiometric Surface A surface that represents the total head in an aquifer: that is, it represents the

height above a datum plane at which the water level stands in tightly cased

wells that penetrate the aquifer.

Precambrian The span of time older than 570 million years.

Quaternary The span of time between 1.6 million years to present.

Seismicity The likelihood of an area being subject to earth quakes; the phenomenon of

earth movements.

Shale A very fine-grained sedimentary rock composed of clay and silt.

Silicification The process by which silica is added to marine clastic and carbonate host

rocks.

Sill A horizontal tabular intrusion that has been emplaced parallel to bedding.

Sinuosity The degree of winding or curving of a stream channel, measured as the ratio

of the length along the channel between two points to the straight air length

between the two points.

Specific Storage The amount of water per unit volume of a saturated formation that is stored or

expelled from storage owing to compressibility and pore water per unit change in head. It is a dimensionless quantity. Specific storage has

dimensions of 1/L.

Storativity The volume of water that a permeable unit will absorb or expel from storage

per unit surface area

Stratigraphy Form, arrangement, geographic distribution, chronologic succession,

classification, and relationships of rock strata.

Tertiary Span of time between 65 and 3 to 2 million years ago.

Thrust Fault A reverse fault in which the dip of the fault plane is relatively shallow.

Traditional Cultural

Property

A property central and historically rooted to the beliefs, customs, and

practices of a living community.

Transmissivity The rate at which water of the prevailing kinematic viscosity is transmitted

through a unit width of an aquifer under a unit hydraulic gradient. It equals

the hydraulic conductivity multiplied by the aguifer thickness

Tuff A compacted deposit of volcanic ash and dust that may contain up to 50

percent sediments, such as sand or clay.

Uplift A structurally high area in the earth's crust produced by upthrusting rocks.

Water Table The level in the saturated zone at which the pressure is equal to the

atmospheric pressure.

Weir An overflow structure built across an open channel, usually to measure the

rate of water flow.

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